

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P518953

Luminaire Tested: **SQ4-BB-150U-125D-835-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518953  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G2-2009-966-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-BB-150U-125D-835-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

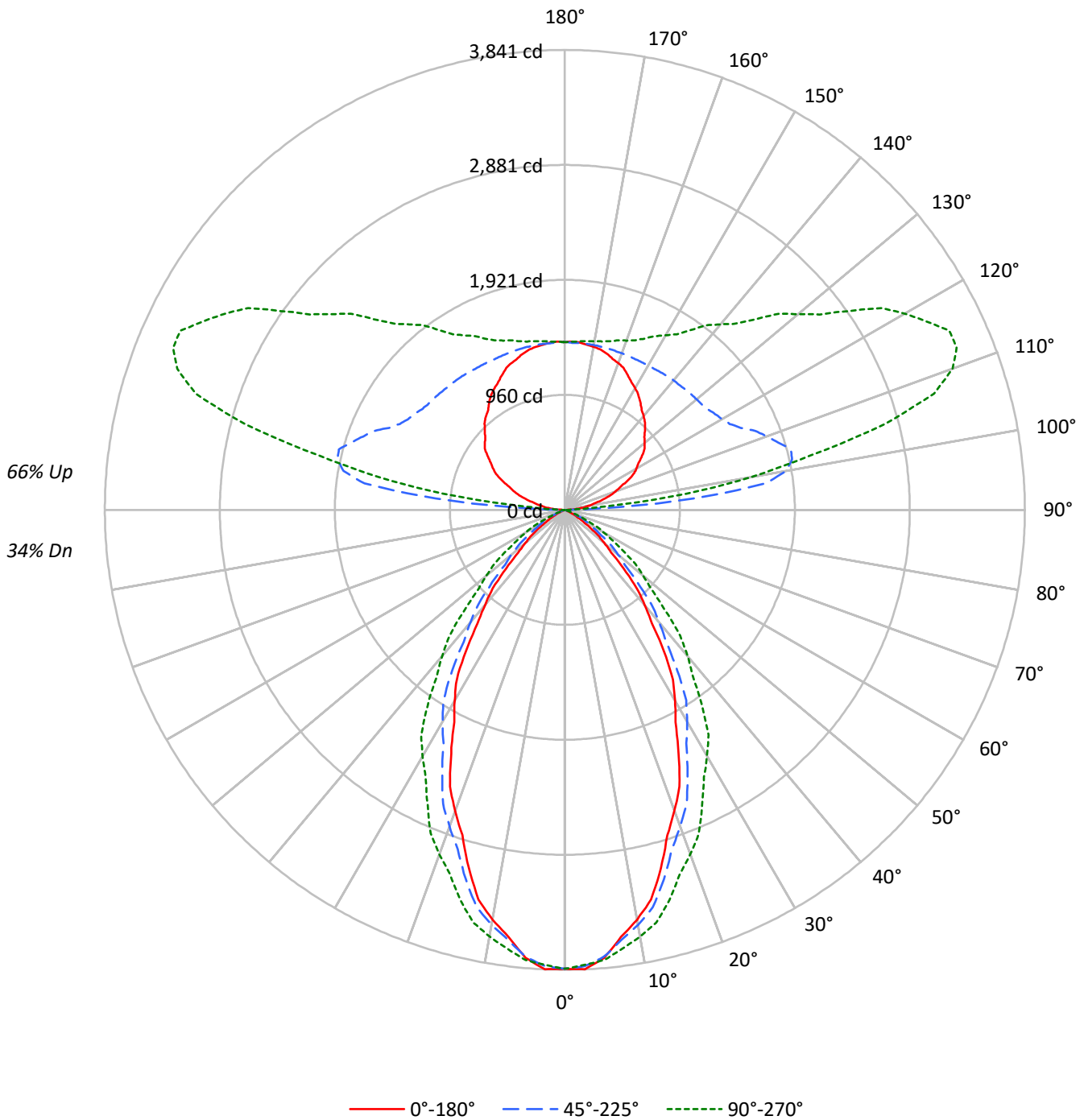
Lumens per Lamp: N/A  
Luminaire Lumens: 13610.3 lumens  
Efficiency: N/A  
Efficacy: 107.1 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 127.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	34
1	95	92	88	85	86	83	80	78	67	65	63	52	51	50	38	37	37	31
2	88	81	76	72	79	74	69	66	60	57	54	47	45	43	35	34	33	28
3	81	73	66	61	73	66	61	56	54	50	47	43	40	38	32	31	30	25
4	75	65	58	53	67	59	53	49	49	45	41	39	36	34	30	28	27	23
5	69	59	51	46	62	54	47	43	44	40	36	35	32	30	27	26	24	21
6	64	53	46	40	58	49	42	38	40	36	32	33	29	27	25	23	22	19
7	59	48	41	36	54	44	38	34	37	32	29	30	27	24	23	21	20	17
8	55	44	37	32	50	41	34	30	34	29	26	28	25	22	22	20	18	16
9	52	40	34	29	47	37	31	27	31	27	24	26	23	20	20	18	17	15
10	48	37	31	26	44	34	29	25	29	25	22	24	21	19	19	17	16	14

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	23571	23571	23571
5°	23191	23134	23306
10°	21699	21989	22603
15°	19727	20353	21486
20°	17511	18421	20035
25°	15250	16458	18408
30°	13062	14497	16867
35°	10831	12306	15007
40°	8322	9840	12787
45°	6015	7450	10289
50°	4098	5553	8160
55°	2664	4016	6342
60°	1528	2828	4584
65°	405	1728	2320
70°	200	534	667
75°	88	45	0
80°	67	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	349.7	2.6
10°-20°	894.4	6.6
20°-30°	1119.6	8.2
30°-40°	1034.2	7.6
40°-50°	694.9	5.1
50°-60°	358.9	2.6
60°-70°	112.4	0.8
70°-80°	7.1	0.1
80°-90°	3.1	0.0
90°-100°	651.3	4.8
100°-110°	1761.1	12.9
110°-120°	1851.5	13.6
120°-130°	1503.9	11.0
130°-140°	1179.7	8.7
140°-150°	905.4	6.7
150°-160°	651.2	4.8
160°-170°	397.8	2.9
170°-180°	134.1	1.0
0°-30°	2363.7	17.4
0°-40°	3397.9	25.0
0°-60°	4451.8	32.7
0°-90°	4574.4	33.6
90°-120°	4263.9	31.3
90°-150°	7852.9	57.7
90°-180°	9036.0	66.4
0°-180°	13610.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3832	3832	3832	3832	3832	
5°	3756	3718	3747	3760	3775	348
15°	3098	3087	3196	3304	3374	863
25°	2247	2265	2425	2591	2712	1030
35°	1442	1479	1639	1832	1999	894
45°	692	733	856	1023	1183	543
55°	248	290	374	481	591	232
65°	28	53	119	143	159	47
75°	4	4	2	0	0	5
85°	0	0	0	0	0	0
90°	3	9	20	21	20	7
95°	101	355	1083	561	333	106
105°	327	506	1954	2882	2764	345
115°	576	705	1620	3136	3541	569
125°	789	904	1460	2464	2895	703
135°	946	1058	1421	1990	2252	731
145°	1100	1182	1402	1703	1833	688
155°	1242	1290	1389	1528	1578	573
165°	1352	1365	1396	1450	1457	381
175°	1403	1402	1397	1415	1412	133
180°	1402	1402	1402	1402	1402	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3832.2	3832.2	3832.2	3832.2	3832.2
2.5°	3841.1	3804.8	3814.4	3814.1	3804.0
5°	3756.1	3718.1	3746.9	3760.2	3774.7
7.5°	3597.4	3567.7	3623.0	3664.5	3694.6
10°	3474.3	3449.0	3520.7	3577.3	3618.9
12.5°	3332.0	3312.4	3399.1	3476.7	3530.0
15°	3098.0	3087.1	3196.2	3303.5	3374.2
17.5°	2847.3	2847.0	2971.5	3104.7	3189.9
20°	2675.3	2680.7	2814.3	2961.2	3060.9
22.5°	2503.2	2515.9	2658.6	2811.7	2925.9
25°	2247.0	2265.1	2425.0	2590.9	2712.4
27.5°	2000.8	2027.3	2195.5	2367.9	2515.8
30°	1839.1	1870.0	2041.2	2222.7	2374.9
32.5°	1680.4	1717.1	1884.0	2075.9	2231.1
35°	1442.4	1478.6	1638.9	1831.8	1998.6
37.5°	1196.6	1232.1	1388.6	1578.5	1758.7
40°	1036.4	1076.2	1225.5	1409.5	1592.6
42.5°	891.0	930.9	1071.2	1252.0	1425.0
45°	691.5	733.2	856.5	1023.3	1182.8
47.5°	526.2	571.5	679.7	830.5	975.9
50°	428.3	473.6	580.3	713.2	852.8
52.5°	349.7	393.5	489.8	615.1	743.1
55°	248.4	290.1	374.5	480.8	591.4
57.5°	171.7	207.6	283.3	372.0	458.7
60°	124.2	158.7	229.9	301.9	372.6
62.5°	82.7	114.2	183.9	239.1	286.6
65°	27.8	53.2	118.7	143.1	159.4
67.5°	14.1	17.0	62.3	65.8	71.2
70°	11.1	11.1	29.7	31.6	37.1
72.5°	8.2	8.2	11.9	15.2	16.3
75°	3.7	3.7	1.9	0.0	0.0
77.5°	1.9	1.9	1.5	0.0	0.0
80°	1.9	1.9	0.0	0.0	0.0
82.5°	0.4	0.4	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.6	1.8	3.9	4.2	3.9
90°	3.0	8.9	19.6	21.1	19.6
92.5°	42.8	156.1	308.1	133.7	96.9
95°	101.1	354.8	1083.2	560.6	333.4
97.5°	162.3	406.9	1688.4	1397.3	1026.2
100°	208.2	428.0	1876.7	1957.2	1582.5
102.5°	250.4	457.2	1943.1	2381.7	2101.5
105°	327.4	505.9	1953.6	2881.8	2763.8
107.5°	398.6	561.4	1868.3	3193.7	3232.9
110°	454.1	601.6	1792.2	3277.5	3444.1

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	503.6	641.6	1722.2	3260.7	3540.7
115°	576.3	704.6	1620.2	3136.5	3540.7
117.5°	647.5	767.9	1553.0	2946.8	3404.9
120°	690.9	808.9	1513.1	2810.6	3278.2
122.5°	732.0	847.6	1489.0	2664.6	3135.8
125°	789.0	904.1	1460.3	2464.3	2895.0
127.5°	841.5	954.5	1443.4	2300.8	2679.6
130°	870.5	987.0	1436.2	2199.8	2542.0
132.5°	900.6	1016.0	1428.9	2108.6	2423.7
135°	945.9	1058.0	1421.1	1989.8	2252.3
137.5°	991.5	1097.4	1414.5	1893.3	2107.2
140°	1022.8	1121.7	1412.1	1831.2	2021.5
142.5°	1053.0	1145.9	1407.2	1775.2	1941.9
145°	1099.8	1182.4	1401.5	1703.1	1833.0
147.5°	1142.3	1215.5	1394.9	1637.9	1737.6
150°	1173.7	1238.6	1392.4	1602.4	1682.1
152.5°	1202.7	1259.3	1391.2	1569.5	1635.0
155°	1241.6	1290.3	1389.4	1527.8	1578.0
157.5°	1282.0	1315.9	1389.7	1498.8	1531.8
160°	1304.9	1333.0	1390.9	1480.5	1504.1
162.5°	1323.0	1346.3	1392.1	1465.9	1483.6
165°	1351.7	1365.0	1395.5	1449.9	1457.3
167.5°	1371.3	1380.5	1395.8	1436.3	1439.8
170°	1383.4	1387.8	1397.0	1430.2	1430.2
172.5°	1393.0	1393.9	1397.0	1422.9	1421.7
175°	1403.0	1401.5	1397.0	1415.0	1412.1
177.5°	1406.3	1402.8	1396.7	1408.7	1405.1
180°	1401.5	1401.5	1401.5	1401.5	1401.5

(END OF REPORT)